

AMENDMENTS TO THE CLAIMS

Listing of claims:

1. (Currently Amended) A method ~~for implementing signaling proxy in a communication network~~, comprising:

~~configuring a proxy processing strategy in a signaling proxy, wherein the proxy processing strategy includes information about a message that needs to be proxy processed; and~~

~~performing proxy processing on a received message and forwarding the proxy processed message after the signaling proxy determining that the received message needs to be proxy processed by the signaling proxy according to the configured strategy.~~

receiving a message by a signaling proxy (SP), wherein the message has a source address and a destination address;

processing the message if the destination address of the message is different than a SP address and an address for which the message is intended; and

sending the message.

2. - 3. (Canceled)

4. (Currently Amended) A~~The method for implementing signaling proxy according to claim 21,~~
~~further wherein processing the message comprises: comprising: when receiving a message from a~~
~~proxied side, the signaling proxy determines that the received message needs to be proxy~~
~~processed according to information of its destination address;~~

replacing the destination address of the received message with a server the address for
which the message is intended; and

replacing the source address of the message with a server side the address of the signaling
proxy SP, respectively, and forwarding the message.

5. (Currently Amended) A~~The method for implementing signaling proxy according to claim 4,~~
~~wherein after receiving a message sent from the server, the signaling proxy replaces source~~
~~address of the message sent from the server with destination address of said original message~~
~~sent from the proxied side and destination address of the message sent from the server with a~~
~~proxied side address respectively, and forwards the message. further comprising:~~

receiving a response from an entity for which the message is intended;

replacing a destination address of the response with the source address of the message;

replacing a source address of the response with the destination address of the message;

and

sending the response.

6. (Currently Amended) ~~A~~The method for implementing signaling proxy according to claim 1,
wherein said signaling proxy processing comprises processing the message comprises:

~~changing~~replacing the source address and the destination IP addresses of the message;

~~and replacing port numbers of the received message;~~

~~replacing data of the an application layer;~~ or

~~updating a signaling state and/or creating session table items.~~

7. (Canceled)

8. (Currently Amended) ~~A~~The method for implementing signaling proxy according to claim 17,
further comprising:

~~wherein when the network device receives a message which is sent from the proxied side~~
~~and needs to be proxy processed, it~~ before receiving the message, forwardings the received
message to the signaling proxySP according to the a forwarding strategy by a network device.

9. - 10. (Canceled)

11. (Currently Amended) ~~An apparatus for implementing signaling proxy, comprising:~~

~~a unit for receiving and recognizing messages, which is configured with a proxy processing strategy, used to recognize a received message which needs to be processed, wherein the proxy processing strategy includes information about a message that needs to be proxy processed;~~

~~a unit for processing messages, which proxy-processes said message that needs to be proxy-processed; and~~

~~a unit for forwarding messages, which forwards the proxy-processed message to a corresponding server.~~

a receiving unit configured to receiving a message, wherein the message has a source address and a destination address;

a processing unit configured to process the message if the destination address of the message is different than a SP address and an address for which the message is intended; and

a sending unit configured to send the message.

12. (Canceled)

13. (Currently Amended) ~~An~~ The apparatus for implementing signaling proxy according to claim 11, wherein the signaling proxy processing comprises:

~~changing source and destination IP addresses and port numbers of the received message, replacing the data of the application layer, updating a signaling state and/or creating session table items.~~

wherein the processing unit is configured to replace the destination address of the message with the address for which the message is intended, and replace the source address of the message with the SP address.

14. (Currently Amended) The apparatus according to claim 13, wherein the receiving unit is further configured to receive a response from an entity for which the message is intended; and wherein the processing unit is further configured to replace a destination address of the response with the source address of the message and replace a source address of the response with the destination address of the message.

~~after the signaling proxy receives a message sent from the server, it replaces source address of the message with destination address of said original message sent from a proxied side and destination address of the message sent from the server with a proxied side address respectively, and forwards the message according to the replaced addresses.~~

15. – 20. (Canceled)

21. (New) The method according to claim 8, wherein the forwarding strategy comprises forwarding the message to the SP according to the destination address of the message.

22. (New) The method according to claim 1, wherein the address for which the message is intended is an address of a terminal or an address of a server.

23. (New) The apparatus according to claim 11, wherein the address for which the message is intended is an address of a terminal or an address of a server.

24. (New) A system, comprising:

a signaling proxy (SP) located between a terminal and a server,

wherein the SP is configured to receive a message and process the message if at least one of a VPN ID, a VLAN ID, a MPLS ID, an IP protocol type, a source address, or a source port of the message meets a strategy of the SP.

25. (New) The system according to claim 24, wherein the SP is serially connected to the terminal and the server.

26. (New) The system according to claim 24 further comprising a router, wherein the router is located between the terminal and the SP.

27. (New) The system according to claim 26, wherein the router is configured to forward the message to the SP according to a forwarding strategy.

28. (New) The system according to claim 27, wherein the forwarding strategy comprises forwarding the message to the SP according to the destination address of the message.